



Mercury and Water Quality Issues in SC

Fish Consumption Advisories

DHEC's Bureau of Water currently collects between 1,800 and 1,900 fish samples each year for mercury analysis. The Office of Environmental Community Health reviews this data and the Bureau of Water updates the existing fish consumption advisories annually. Current advisory information, downloads, and a clickable map are available on [DHEC's Fish Consumption Advisory page](#).

South Carolina first issued fish consumption advisories in 1976 for PCBs (polychlorinated biphenyls) in Lake Hartwell and for mercury in Lake Jocassee and Langley Pond. Fish consumption advisories have been issued each year since 1976, but increased numbers of mercury advisories have been issued since 1993. In 2005, mercury advisories were issued for 57 waterbodies in SC.

Advisories were also issued for four types of saltwater fish found off the coast of SC: King Mackerel, Shark, Tilefish, and Swordfish. Higher concentrations of mercury in fish tissue tend to be in the Coastal Plain of South Carolina with relatively lower concentrations (and therefore fewer advisories) in the Piedmont.

Current advisory booklets are distributed to OB/GYN offices, federal rural health clinics, DHEC district health and EQC offices, county health departments, DHEC WIC clinics, nurse midwives, the South Carolina Department of Natural Resources, many South Carolina state parks, and mailing list of individuals who have requested the advisory annually. Additional educational materials are also distributed.

NPDES Permitting

A National Pollutant Discharge Elimination System (NPDES) permit limits the amount of pollutants that a "point source" can release into surface waters. A point source is any industry, business group, or government agency that uses water and puts wastewater back into the environment. When wastewater flows into surface water and it contains, or may contain anything considered a pollutant, a permit is needed. NPDES permits are a part of the Federal "Clean Water Act."

DHEC has issued 115 NPDES permits that require mercury monitoring. There are 13 permits with mercury limits. A mercury limit keeps a facility from releasing more mercury into a stream than is allowed under South Carolina's water quality standards. When there is a known source of mercury, DHEC requires "a mercury minimization analysis". This encourages reduction of mercury at its source.

Wastewater applied to land and stormwater releases from certain facilities may also require mercury monitoring.

